

In the Claims:

1. (Currently Amended) A method of battery monitoring ~~including the steps of comprising the following steps performed in a computer:~~

- a) acquiring a battery voltage measurement from the battery;
- b) acquiring a time measurement associated with the battery voltage measurement acquired in step a);
- c) determining a scaled voltage value by scaling the battery voltage measurement made in step a) with respect to a predetermined end voltage;
- d) determining a scaled time value from the scaled voltage value determined in step c) in accordance with a predetermined battery characteristic; and
- e) ~~obtaining estimating~~ a reserve time from the scaled time value determined in step d), the reserve time being indicative of the difference between the time measurement acquired in step b) and an end time associated with the predetermined end voltage; and
- f) communicating the estimated reserve time.

2. (Currently Amended) A method of battery monitoring ~~including the steps of comprising the following steps performed in a computer:~~

- a) acquiring a battery voltage measurement from the battery;
- b) acquiring a time measurement associated with the battery voltage measurement acquired in step a);
- c) determining a scaled voltage value by scaling the battery voltage measurement made in step a) with respect to a start voltage and a predetermined end voltage;
- d) determining a scaled time value from the scaled voltage value determined in step c) in accordance with a predetermined battery discharge characteristic; and
- e) ~~obtaining estimating~~ an absolute time value from the scaled time value determined in step d); and
- f) communicating the estimated absolute time value.

3. (Original) A method according to claim 2 wherein the absolute time value is a reserve time indicative of the difference between the time measurement acquired in step b) and an end time associated with the predetermined end voltage.

4. (Previously Presented) A method according to claim 2 further including performing one or more additional repeats of steps a) -e) during a single battery discharge.

5. (Original) A method according to claim 4 wherein step e) includes the steps of: e) i) determining the difference between a lower time measurement and an upper time measurement; e) ii) determining the difference between a pair of scaled time values associated with the lower and upper time measurements; and e) iii) determining the ratio of the differences determined in steps e) i) and e) ii).

6. (Original) A method according to claim 5 wherein the lower and upper time measurements change for each repeat of step e).

7. (Original) A method according to claim 6 wherein the lower and upper time measurements are associated with a pair of adjacent repeats.

8. (Previously Presented) A method according to claim 5 wherein the lower time measurement is the same for each repeat of step e), and the upper time measurement changes for each repeat of step e).

9. (Previously Presented) A method according to claim 4 wherein the battery voltage measurements include a measured start voltage, and wherein the scaled voltage value is determined in step c) by scaling the battery voltage measurement with respect to the measured start voltage and the predetermined end voltage.

10. (Previously Presented) A method according to claim 2 further including the step of receiving and storing the predetermined end voltage.

11. (Original) A method according to claim 10 further including the step of rescaling the battery discharge characteristic in accordance with the stored end voltage.

12. (Currently Amended) A method of characterising a battery including comprising the following steps performed by a computer:

- a) acquiring a plurality of battery voltage measurements from [[the]] a battery, the battery voltage measurements including a start voltage and an end voltage;
- b) acquiring a plurality of time measurements, each time measurement being associated with a respective battery voltage measurement, the time measurements including an end time associated with the end voltage;
- c) determining a plurality of scaled voltage values by scaling each battery voltage measurement with respect to the start voltage and the end voltage;
- d) determining a plurality of scaled time values by scaling each time measurement with respect to the end time; and
- e) storing determining a battery discharge characteristic indicative of the a relationship between the scaled voltage values and the scaled time values;
- f) generating a capacity estimate from battery voltage measurements using the determined battery discharge characteristic; and
- g) communicating the estimated capacity estimate.

13. (Canceled)

14. (Canceled)

15. (Currently Amended) A computer program product comprising computer program code embodied in a computer-readable storage medium comprising computer program code embodied therein, the computer program code configured to implement the method of Claim 12.

16. (Canceled)

17. (Currently Amended) A system configured to implement the method of Claim 12, the system including a sensor configured to ~~acquire~~ acquire the battery voltage measurements; a timer configured to generate the time measurements; and a processor configured to perform steps c) to [[e]] g).

18. (Previously Presented) A system according to claim 17 further including a store configured to store the result of step e).

19. (Currently Amended) A system according to claim 17 further including one or more output devices configured to output the result of step [[e]] f).

20. (Original) A system according to claim 19 wherein the output device is a display unit.

21. (Previously Presented) A computer readable storage medium containing a battery discharge characteristic which has been determined by the method of claim 12.

22. (Previously Presented) A method according to claim 1 further including performing one or more additional repeats of steps a) -e) during a single battery discharge.

23. (Previously Presented) A method according to claim 22 wherein step e) includes the steps of: e) i) determining the difference between a lower time measurement and an upper time measurement; e) ii) determining the difference between a pair of scaled time values associated with the lower and upper time measurements; and e) iii) determining the ratio of the differences determined in steps e) i) and e) ii).

24. (Previously Presented) A method according to claim 23 wherein step e) includes the steps of: e) i) determining the difference between a lower time measurement and an upper time measurement; e) ii) determining the difference between a pair of scaled time values associated with the lower and upper time measurements; and e) iii) determining the ratio of the differences determined in steps e) i) and e) ii).

25. (Previously Presented) A method according to claim 24 wherein the lower and upper time measurements change for each repeat of step e).

26. (Previously Presented) A method according to claim 25 wherein the lower and upper time measurements are associated with a pair of adjacent repeats.

27. (Previously Presented) A method according to claim 24 wherein the lower time measurement is the same for each repeat of step e), and the upper time measurement changes for each repeat of step e).

28. (Previously Presented) A method according to claim 23 wherein the battery voltage measurements include a measured start voltage, and wherein the scaled voltage value is determined in step c) by scaling the battery voltage measurement with respect to the measured start voltage and the predetermined end voltage.

29. (Previously Presented) A method according to claim 1 further including the step of receiving and storing the predetermined end voltage.

30. (Previously Presented) A method according to claim 29 further including the step of re-scaling the battery discharge characteristic in accordance with the stored end voltage.

31. (Currently Amended) A ~~computer program product comprising computer program code embodied in~~ computer-readable storage medium comprising computer program code embodied therein, the computer program code configured to implement the method of Claim 1.

32. (Currently Amended) A ~~computer program product comprising computer program code embodied in~~ computer-readable storage medium comprising computer program code embodied therein, the computer program code configured to implement the method of Claim 2.

33. (Currently Amended) A system configured to implement the method of Claim 1, the system including a sensor configured to acquire the battery voltage measurements; a timer configured to generate the time measurements; and a processor configured to perform steps c) to [[e]] f.

34. (Previously Presented) A system according to claim 33 further including a store configured to store the result of step e).

35. (Previously Presented) A system according to claim 33 further including one or more output devices configured to output the result of step e).

36. (Previously Presented) A system according to claim 35 wherein the output device is a display unit.

37. (Currently Amended) A system configured to implement the method of Claim 2, the system including a sensor configured to acquire the battery voltage measurements; a timer configured to generate the time measurements; and a processor configured to perform steps c) to [[e]] f.

38. (Previously Presented) A system according to claim 37 further including a store configured to store the result of step e).

39. (Previously Presented) A system according to claim 37 further including one or more output devices configured to output the result of step e).

40. (Previously Presented) A system according to claim 39 wherein the output device is a display unit.